Title (en)

Cyclonic separation device

Title (de)

Zyklonenabscheidungsvorrichtung

Title (fr)

Dispositif à séparation cyclonique

Publication

EP 2918211 B1 20170322 (EN)

Application

EP 15158403 A 20150310

Priority

GB 201404229 A 20140311

Abstract (en)

[origin: EP2918211A1] A cyclonic separation device comprises a plurality of cyclonic separators fluidly arranged in parallel with each other, each cyclonic separator comprising a chamber 18 having a circular-section side wall 19, a fluid inlet 20 and a fluid outlet 21 disposed at one end of the cyclone chamber 18, and an opening at the second end of the cyclone chamber 18 through which separated matter passes out of the chamber for collection. The cyclonic separators are arranged in a rotatable body 17 such that their respective cyclone axes B are outwardly inclined relative to an axis A of rotation of the body 17 and such that the second end of each cyclone chamber 18 is disposed radially outwardly of its first end with respect to the axis A of rotation. A motor 15 rotates the body 17 about its axis A of rotation and so imparts a radially outward force on separated matter forced against the side wall 19 by the cyclonic action, the radial force serving to rapidly force the matter axially of the towards the opening. The separation efficiency is thereby improved by the radial force.

IPC 8 full level

A47L 9/16 (2006.01)

CPC (source: EP GB US)

A47L 9/1625 (2013.01 - EP US); **A47L 9/1641** (2013.01 - EP US); **A47L 9/1675** (2013.01 - EP GB US); **A47L 9/1683** (2013.01 - GB); **B04C 3/04** (2013.01 - US)

Cited by

AU2018254191B2; WO2018193234A1; WO2022103275A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2918211 A1 20150916; **EP 2918211 B1 20170322**; **EP 2918211 B8 20170517**; AU 2015201184 A1 20151001; AU 2015201184 B2 20181206; CN 104905735 A 20150916; CN 104905735 B 20180105; GB 201404229 D0 20140423; GB 2524018 A 20150916; GB 2524018 B 20170104; US 2015257618 A1 20150917; US 9402522 B2 20160802

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